Docket No.: 04305/0205482-US0

(PATENT)

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Henrik Tho	Application of: msen et al.	
Application PCT/DK200	No.: National Phase of 05/000247	Confirmation No.: N/A
Filed: Conc	urrently Herewith	Art Unit: N/A
For: SIG	MA DELTA MODULATOR	Examiner: Not Yet Assigned
	INFORMATION DISCLOSURE S	STATEMENT (IDS)
P.O. Box 14	ner for Patents 950 VA 22313-1450	
Dear Sir:		
1.98, and it be considered	This Information Disclosure Statement is sub- is requested that the information set forth in ed during the pendency of the above-identifi- the filing date of the above-identified applica-	this statement and in the listed documents ed application, and any other application
	. This IDS should be considered, in accordance of the boxes A-D)	ee with 37 C.F.R. 1.97, as it is filed:
xA.	within three months of the filing date of application of within three months of the en- above identified national application	
B.	before the mailing date of a first office action after filing a request for continued exa	
C.	after (A) and (B) above, but before fina Applicants have made the necessary statement necessary fee in box "ii" below.	

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(check one of the boxes "i" and "ii" below:)
i. Counsel states that, upon information and belief, each item of information listed herein was (check one of boxes (a) or (b))
(a) first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this IDS; or
(b) not cited in a communication from a foreign patent office in a counterpart foreign application and, to the knowledge of undersigned after making reasonable inquiry, was not known to any individual designated in 1.56(c) more than three months prior to the filing of this IDS.
ii. A check for the fee set forth in 1. 17(p), presently believed to be \$180, is enclosed.
D. after (A), (B) and (C) above, but before payment of the issue fee: Applicant petitions under 37 C.F.R. 1.97(d) for the consideration of this IDS. Under 37 CFR 1.17(i) a check in the amount of \$180.00 is enclosed. Counsel certifies that, upon information and belief, each item of information listed herein was
(check one of the boxes "a" and "b" below:)
(a) first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this IDS; or
(b) was not cited in a communication from a foreign patent office in a counterpart foreign application and, to the knowledge of undersigned after making reasonable inquiry, was not known to any individual designated in 1.56(c) more than three months prior to the filing of this IDS.

2. In accordance with 37 C.F.R. 1.98, this IDS includes a list (e.g., form PTO/SB/08) of all patents, publications, or other information submitted for consideration by the office, either incorporated into this IDS or as an attachment hereto. A copy of each document listed is attached, except as explained below.

(check boxes A, B and/or C and fill in blanks, if appropriate.)

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x A. Pursuant to the Notice issued by the United States Patent and Trademark Office dated July 11, 2003 waiving the requirements of 37 C.F.R. § 1.98(a)(2)(i), a copy/copies of the United States Patent on PTO/SB08 is/are not being submitted. B. Document(s) \_\_\_\_\_ is (are) deemed substantially cumulative to document(s) \_\_\_\_\_, and, in accordance with 1.98(c), only a copy of each of the latter documents is enclosed. C. Certain documents were previously cited by or submitted to the Office in the following prior applications, which are relied upon under 35 U.S.C. 120: << INSERT SERIAL NO. & FILING DATE>> Applicant identifies these documents by attaching hereto copies of the forms PTO-892, PTO-1449 and/or PTO/SB/08 from the files of the prior application(s) or a fresh PTO/SB/08 listing these documents, and request that they be considered and made of record in accordance with 1.98(d). Per 37 CFR 1.98(d), copies of these documents need not be filed in this application. 3. Cite No(s). \_\_\_\_\_ are not in the English language. In accordance with 1.98(c), Applicant states: An English translation of each document (or of the pertinent portions thereof), or a copy of each corresponding Englishlanguage patent or application, or English-language abstract (or claim) is enclosed. The requirement for a concise explanation of the relevance of any foreign language document is satisfied by the attached search report; citation of the documents cited in the search report shall not be construed as an admission that they are or are considered to be, material to patentability of the subject matter claimed herein (See MPEP §609). A concise explanation of the relevance of document(s) is set forth as follows: [Insert concise explanation of A concise explanation of the relevance of document(s) can be found on page(s) \_\_\_\_\_ of the specification. A concise explanation of document(s) \_\_\_\_\_ can be found on the attached sheet.

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English language (see reply the final rules; 1135 OG 13	te is necessary for documents in the to to Comments 67 in the preamble to at 20).  g provided for the examiner's
	Report, dated, which issued during the No which corresponds to the present
construed as a representation that a search considered to be, material to patentability as or attached is (or constitutes) prior art. Unless	1.97(g) and (h), the filing of this IDS should not be has been made or that information cited is, or is defined in §1.56 (b), or that any cited document listed other-wise indicated, the date of publication indicated and Applicant reserves the right to prove that the date
Early and favorable consideration is	s earnestly solicited.
The Commissioner is authorized to excess in this fee to Deposit Account No. 04-0	charge any deficiency of up to \$300.00 or credit any 100.
Dated: September 26, 2006	Respectfully submitted,  By S. Peter Ludwig Registration No.: 25,351 DARBY & DARBY P.C. P.O. Box 5257 New York, New York 10150-5257 (212) 527-7700 (212) 527-7701 (Fax) Attorneys/Agents For Applicant

PTO/SB/08a/b (07-06)

Approved for use through 09/30/2006. OMB 0651-0031

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Sut	Substitute for form 1449A/B/PTO			Complete If Known	
Constitution (Chill 1440/42), 10				Application Number	Not Yet Assigned
II.	NFORMATION	I DI	SCLOSURE	Filing Date	Concurrently Herewith
STATEMENT BY APPLICANT			APPLICANT	First Named Inventor .	Henrik Thomsen
_	(Use as many sheets as necessary)			Art Unit	N/A
				Examiner Name	Not Yet Assigned
Sheet	1	of	1	Attorney Docket Number	04305/0205482-US0

U.S. PATENT DOCUMENTS					
					Pages, Columns, Lines, Where
Initials*	No.	Number-Kind Code <sup>2</sup> (#known)	MM-DD-YYYY	Applicant of Cited Document	Relevant Passages or Relevant Figures Appear
	AA*	US-20030067404-A1	06-10-2003	Ruha et al.	
	AB*	US-3,931,596	01-06-1976	Gersho et al.	
	AC*	US-6,642,874	11-04-2003	Lin et ai.	
	AD*	US-20020030618-A1	12-03-2002	Cusinato et al.	

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No.	Foreign Patent Document  Country Code <sup>3</sup> -Number <sup>4</sup> -Kind Code <sup>4</sup> (# known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	16
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"EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. "CITE NO.: Those application(s) which are marked with an single asterisk (") next to the Cite No. are not supplied (under 37 CFR 1.98(a)(2)(iii)) because that application was filed after June 30, 2003 or is available in the IFW. "Applicant's unique citation designation number (optional). "See Kinds Codes of USPTO Patent Documents at <a href="https://www.uspto.gov">www.uspto.gov</a> or MPEP 901.04. "Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). "For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document." Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. "Applicant is to place a check mark here if English language Translation is attached."

	NON PATENT LITERATURE DOCUMENTS				
		Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>		
	CA	Aldajani, M.A. et al., "An adaptive structure for sigma delta modulation with improved dynamic range." Circuits and Systems. 2000. Proceedings of the 43rd IEEE Midwest Symposium on August 8-11, 2000, Piscataway, NJ, USA. IEEE 8 August 2000, pages 390-394.			
	СВ	Yu, J et al., "Adaptive Quantisation of One-Bit Sigma-Delta Modulation." IEEE Proceedings G. Electronic Circuits and Systems, Institution of Eletrical Engineers, Stevenage, GB. Vol.139, No. 1, 1 February 1992, pages 39-44.			
	CC	Dunn and Sandler, Adaptive sigma-delta modulation for use in DACs, Electronics Letters, 9 May 1996, Vol. 32, No. 10, pages 867-868.			

<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Examiner Signature	/Joseph Lauture/	Date Considered	06/29/2010

<sup>&</sup>lt;sup>1</sup>Applicant's unique citation designation number (optional). <sup>2</sup>Applicant is to place a check mark here if English language Translation is attached.